IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

In re Application for:

Claus Gschiermeister, et al.

Serial No. 10/562,380

Filed: December 23, 2005

For: **CHANGE NOTIFICATION AGENT**

Examiner: Kimbleann C. Verdi

Art Unit: 2194

Confirmation No.: 1914

Mail Stop Appeal Brief - Patents
Commissioner for Patents
P.O. Box 1450
Alexandria, VA 22313-1450

REPLY BRIEF

Pursuant to 37 C.F.R. § 41.41, Appellants submit the following Reply Brief for consideration by the Board of Patent Appeals and Interferences ("Board"). This Reply Brief is responsive to the Examiner's Answer of February 3, 2011. The Reply Brief does not include any new amendment, new affidavits, or new evidence. Please charge any additional amounts due or credit any overpayment to Deposit Account No. 02-2666.

I. Rejection of Claims Under 35 U.S.C. § 103(a)

A. Independent claims 1, 14, and 28 and Dependent Claims 4, 5, 9, 18, 19, and 23 are not obvious at least because Brodsky and Chow fail to teach requesting changed data from the data object

Claims 1, 4, 5, 7, 9, 14, 15, 18, 19, 21, 23, and 28 remain rejected under 35 U.S.C. § 103(a) as allegedly being obvious over Brodsky et al. (U.S. Patent No. 5,991,536) ("Brodsky") in view of Chow et al. (U.S. Patent No. 6,029,175) ("Chow").

To establish a *prima facie* case of obviousness, the Examiner must provide some articulated reasoning to support the conclusion of obviousness. KSR International Co. v. Teleflex Inc., 127 S.Ct. 1727, 1741, 82 USPQ2d 1385 (2007) (quoting In re Kahn, 441 F.3d 977, 988, USPQ2d 1329, 1336 (Fed. Cir. 2006)).

Independent claim 1 recites "requesting, by an agent executing in a computer system, changed data from the data object." Independent claim 14 recites "to call a second method by the agent to obtain changed data from the data object." Independent claim 28 recites "getting changed data from the data object." The Appellants note in the Appeal Brief that Chow does not teach requesting or obtaining changed data from the data object because Chow discloses that the Revision Manager obtains the entire object from the network and the clients reload the entire object. Neither the Revision Manager nor the client specifically requests changed data from the object. See Appeal Brief, pages 6-8.

The Examiner repeats her previous assertion that Chow teaches the above limitations, which is rebutted by each of the arguments set forth in the Appeal Brief mentioned above. The Examiner now also adds:

> In view of Appellants' specification, the terms data and data object have the same meaning since an "object" is described "In the following, the term "object" is used to refer to a particular master data object (i.e., a physical Location, Location-Product, or Transportation Lane in the context of an application, for example a logistics application or a supply chain management environment", *pages 5-6, paragraph 0029, lines 2-5, Appellants' specification.*

See Examiner's Answer, pages 31-39 (emphasis in original). However, the Examiner's interpretation of the claim is unreasonable. Under M.P.E.P. § 2111, claims must be "given their broadest reasonable interpretation consistent with the specification." See Phillips v. AWH Corp., 415 F.3d 1303, 75 USPQ2d 1321 (Fed. Cir. 2005) (*en banc*). This means that the words of the claim must be given their plain meaning unless the plain meaning is inconsistent with the specification. See In re Zletz, 893 F.2d 319, 321 (Fed. Cir. 1989); See M.P.E.P. §2111.01(I). Plain meaning refers to the ordinary and customary meaning given to the term by those of ordinary skill in the art. See Phillips v. AWH Corp., 415 F.3d 1303, 1313 (Fed. Cir. 2005) (*en banc*); See M.P.E.P. § 2111.01(III).

In the claims, the terms "data" and "data object" do not have the same meaning. The phrase "data from the data object" would be construed by a person having ordinary skill in the art of object oriented programming as distinct pieces of information (i.e., "data") stored in a data structure (i.e., a "data object"). The data object holds the data and includes the functions that manipulate the data. This interpretation of the terms "data" and "data object" is also consistent with the Appellants' Specification. The Examiner refers to a section of the Appellants' Specification which states that "the term 'object' is used to refer to a particular master data object" to interpret the terms "data" and "data object" as having the same meaning. However, this section of the Appellants' Specification does not define the terms "data" and "data object." It also does not state that the terms "data" and "data object" have the same meaning. Rather, this section merely states that the term "object" refers to a particular master data object. In other words, the term "object" is used as a short form for the phrase "a particular master data object" throughout the Appellants' Specification. Furthermore, the term "master data object" does not have the same meaning as the term "data." The term "master data object" would be construed by a person having ordinary skill in the art as a data object that holds the master data and includes the functions that manipulate the master data, and the term "master data" refers to data that is shared and used by several applications that make up the system. The Examiner does not explain and the Appellants have been unable to discern how the terms "data" and "data object" have the same meaning in view of the Appellants' Specification. Therefore, the Examiner's interpretation of the terms "data" and "data object" as having the same meaning is unreasonable and not supported by the Appellants' Specification.

The Examiner further states:

> In addition, the limitation of "requesting changed data from the data object" inherently encompasses requesting the changed and unchanged data of the data object (i.e. the entire data object) since Appellants' specification describes the changes to the data object occurring at the data object level, "FIG. 1 illustrates a CNA 100 which is configured to communicate, on the one hand, with a number of data objects 10, 20, 30, and on the other hand, with a number of applications 210, 220 which each works with one or more of these objects. The objects may represent locations, location-product, and transportation lane in context of a business application. The objects are subject to changes. Furthermore, new objects may be added or objects may be deleted. As soon as there is a change in the objects, there may be changes necessary in applications as well", *page 6, paragraph 0031, lines 1-8 of Appellants' specification.*

See Examiner's Answer, pages 31-39 (emphasis in original). However, the allegation that the claim limitation "inherently" encompasses requesting the changed and unchanged data of the data object is not an appropriate standard for claim interpretation. The Examiner has provided no citation to any authority for the "inherent" standard for claim interpretation. Rather, the Examiner appears to have created a new standard. However, this standard is contrary to the M.P.E.P. which clearly sets forth that the words of the claim must be given their plain meaning unless the plain meaning is inconsistent with the specification. See In re Zletz, 893 F.2d 319, 321 (Fed. Cir. 1989); See M.P.E.P. §2111.01(I) THE WORDS OF A CLAIM MUST BE GIVEN THEIR "PLAIN MEANING" UNLESS SUCH MEANING IS INCONSISTENT WITH THE SPECIFICATION.

The Examiner refers to a portion of the Appellants' Specification which states that the objects are subject to changes, and thus the Examiner asserts that the changes to the data objects occur at the data object level. The Appellants are unable to discern and the Examiner does not explain how the Appellants' Specification describes that the changes to the data objects occur at the data object level. Furthermore, the Appellants are unable to discern and the Examiner does not explain what it means for changes to occur at the "data object level." Additionally, the Appellants emphasize that the claims recite "requesting changed data from the data object." It is unclear how "the changes to the data object occurring at the data object level" relates to

"requesting changed data from the data object." How an object is changed does not establish that the entire object is requested to obtain the changed data from the data object. Rather, changed data could be specifically requested from a data object, without requesting the entire data object which would include changed and unchanged data along with the functions that manipulate the data. Therefore, the Examiner's reasoning is clearly a *non sequitur*.

The Examiner once again states the following:

> It would have been obvious to a person of ordinary skill in the art at the time the invention was made to have modified the notification manager of Brodsky with the teachings of Revision Manager from Chow because this feature would have provided a mechanism which collects at a site convenient to a group of users a single cache of the most recent versions of documents so that all members of the group can have quick and inexpensive access, while the group as a whole can significantly reduce communication costs (col. 6, lines 57-62 of Chow).

See Examiner's Answer, page 39. The Appellants note in the Appeal Brief that the Examiner has not articulated "a finding that there was some teaching, suggestion, or motivation, either in the references themselves or in the knowledge generally available to one of ordinary skill in the art, to modify the reference or to combine reference teachings" as required by M.P.E.P. § 2143. Rather, there is no motivation to modify the notification manager of Brodsky with the teachings of the revision manager of Chow to provide a mechanism which collects at a site the most recent versions of documents because Brodsky provides for this mechanism via its object hierarchy. See Appeal Brief, pages 8-9. The Examiner has not responded to or rebutted this argument. The Examiner's entire answer to this argument is an exact restatement of the Examiner's position from the Advisory Action and is rebutted by the arguments set forth in the Appeal Brief on pages 8-9. See Examiner's Answer, page 39. Therefore, the Appellants refer the Board to these unrebutted arguments in support of Appellants' position that the Examiner has not established a motivation to modify Brodsky with the teachings of Chow.

For at least the reasons mentioned above, the Examiner has failed to establish a *prima facie* case of obviousness because the Examiner has not established that Brodsky and Chow teach each element of claims 1, 14, and 28. Furthermore, the Examiner has not articulated a finding that there was some teaching, suggestion, or motivation to modify Brodsky with the

teachings of Chow. Accordingly, the Appellants respectfully request that the rejection of claims 1, 14, and 28 be reversed.

Dependent claims 2-6, 8-12, 16-20, and 22-26 depend from one of independent claims 1 and 14 and thus incorporate the respective limitations thereof. For at least the aforementioned reasons relating to independent claims 1 and 14, Brodsky and Chow fail teach each and every element of these dependent claims. Accordingly, the Appellants respectfully request that the rejection of claims 2-6, 8-12, 16-20, and 22-26 be reversed.

B.   Claims 7 and 21 are not obvious because Brodsky and Chow fail to teach filtering out data from the changed data not to be communicated to the application

Claim 7 recites "filtering out data from the changed data not to be communicated to the application, prior to transmitting the changed data to the application." Claim 21 recites "the agent filters out data from the relevant changed data that is not to be communicated to the application, prior to transmitting the changed data to the application."

The Appellants note in the Appeal Brief that the Examiner's interpretation of Brodsky is improper. Brodsky does not filter out observed objects that do not have associated observer objects because every one of the observed objects has at least one associated observer object. See Appeal Brief, pages 10-11. The Examiner maintains the position that "the notification manager filters out observed objects that do not have associated observer objects" and adds:

> [T]he notification manager filters out observed objects that do not have associated observer objects since "an observed object 112 is added, deleted, or updated from the object hierarchy", col. 4, lines 39-40, "the notification manager 110 maintains a list of both observed objects 112 and observer objects 116", *col. 4, lines 44-46*, the notification manager would need to remove a deleted observed object from its list so that changes would not be communicated to the application after being deleted, "the observer objects register with the notification manager, so that they are notified when changes or modifications are made to the observed objects", *col. 4, lines 28-30*, and each observed object may have zero to many observer objects "where each observed object may have multiple observer objects", *col. 4, lines 45-46*.

See Examiner's Answer, pages 51-52 (emphasis in original). However, adding, deleting, and updating an observed object in an object hierarchy does not teach filtering out observed objects that do not have associated observer objects. Similarly, the notification manager removing a deleted observed object from its list does not teach filtering out observed objects.

The Examiner also states that "each observed object may have zero to many observer objects," because Brodsky discloses that "each observed object 112 may have multiple observer objects 116." See Brodsky, column 4, lines 44-47. However, it does not follow that because each observed object may have multiple observer objects, each observed object may also have zero observer objects, and thus the notification manager filters out observed objects that do not have associated observer objects, as alleged by the Examiner. The phrase "multiple observer objects" means more than one observer object. In other words, Brodsky discloses that each observed object may have more than one observer object. The fact that an observed object may have more than one observer object does not teach that the observed object may also have zero observer objects. By definition, an observed object must have an associated observer object. Otherwise, the object would not be an observed object. Therefore, Brodsky does not teach that the notification manager filters out observed objects that do not have associated observer objects.

The Appellants also note in the Appeal Brief that Brodsky does not teach filtering out data from the relevant changed data that is not to be communicated to the application because Brodsky never filters, or even accesses, the data of the modified observed object. Rather, Brodsky discloses that the notification manager interfaces to the object hierarchy and accesses certain status information contained in the object hierarchy. From this status information, the notification manager determines which observed objects have been modified and then notifies the associated observer objects with information concerning the changes. Thus, the notification manager never filters, or even accesses, the data of the modified observed object, but rather only interfaces with the object hierarchy to determine which observed objects have been changed. See Appeal Brief, pages 10-11.

The Examiner repeats her previous assertion that Brodsky teaches "filtering out data objects from the changed data objects not to be communicated to an application," which is

rebutted by each of the arguments set forth in the Appeal Brief mentioned above. The Examiner also responds by stating:

> Support for this limitation was interpreted by the original claim "filtering out data objects whose changes are not to be communicated to an application" and in view of Appellants' specification, specifically page 8 paragraph 0044, lines 1-6 and page 11, paragraph 0065, lines 5-8, based on Appellants' appeal page 4, lines 8-10. In view of Appellants' specification, the terms data and changed data have the same meaning as the terms data object and changed data object since the limitation of "filtering out data from the changed data not to be communicated with the application" is described as occurring at the data object level, "In case that not all the changes of an object are relevant for each of the registered applications, the agent may maintain a list of fields of the respective data object whose changes are relevant for the respective application. Then, based on this list, an operation is performed to filter out data objects whose changes are not to be communicated to an application, prior to the operation of transmitting the relevant changed data to the application", *page 8, paragraph 0044, lines 1-6 of Appellants' specification*, "Before the changes are finally communicated to the applications, an applications method named FILTER_CHANGED_DATA is called. Here the applications can define special logics to filter out some additional objects and prevent them to be reported", *page 11, paragraph 0065, lines 5-8 of Appellants' specification*. In addition, in view of Appellants' specification the limitation of a changed data object not to be communicated to the application is interpreted as the changed data object not relevant for the application which is equivalent to the application did not register for the data object.

See Examiner's Answer, pages 52-55 (emphasis in original). As mentioned above in regard to the independent claims, the terms "data" and "data object" do not have the same meaning, and thus the phrases "changed data" and "changed data object" do not have the same meaning. Thus, "filtering out data from the changed data not to be communicated to the application," as recited in the claim, does not have the same meaning as "filtering out data objects from the changed data objects not to be communicated to an application," which the Examiner alleges is being taught by Brodsky.

Furthermore, it is improper to import claim limitations from the specification in interpreting the claim. See Superguide Corp. v. DirecTV Enterprises, Inc., 358 F.3d 870, 875

(Fed. Cir. 2004); See M.P.E.P. §2111.01(II). Here, the Examiner imports claim limitations from the original claim and from Appellants' Specification in interpreting the claim. For example, the Examiner states that "the terms data and changed data have the same meaning as the terms data object and changed data object since the limitation of 'filtering out data from the changed data not to be communicated with the application' is described as occurring at the data object level." The Appellants are again unable to discern and the Examiner does not explain how the Appellants' Specification describes that the filtering of data occurs at the data object level. Furthermore, the Appellants are unable to discern and the Examiner does not explain what it means for the filtering to occur at the "data object level." Therefore, the Examiner's interpretation of the terms in the claim is unreasonable and improperly based on the Appellants' Specification.

Therefore, Brodsky fails to teach the above limitation of claims 7 and 21. The Examiner does not indicate and the Appellants' cannot discern any part of Chow that cures the aforementioned deficiencies of Brodsky. Thus, the Examiner has not established that Brodsky and Chow teach each element of claims 7 and 21 as required to establish a *prima facie* case of obviousness. Accordingly, the Appellants respectfully request that the rejection of claims 7 and 21 be reversed.

C. Claim 15 is not obvious because Brodsky and Chow fail to teach the agent generating a second input interface to allow for registering the entry representative of the application

Claim 15 recites "the agent generates a first input interface to allow for registering the entry representative of the data object, and generates a second input interface to allow for registering the entry representative of the application." The Examiner repeats her previous assertion that Brodsky teaches the above limitations. The cited sections of Brodsky disclose that a typical observer object is a user interface object, which registers with the notification manager to be notified when changes are made to an observed object. See Brodsky, column 3 lines 60-63, column 4 lines 28-31. However, Brodsky does not disclose that such a user interface allows for registering an observer object. Rather, the user interface is an observer object that registers with

the notification manager. Thus, <u>Brodsky</u> does not teach "a second input interface to allow for registering the entry representative of the application."

The Appellants note in the Appeal Brief that <u>Brodsky</u> does not teach generating a view for registering an observed object and generating a different view for registering an observer object. See Appeal Brief, pages 12-13. The Examiner responds by stating:

> In response to appellants' argument that the references fail to show certain features of appellants' invention, it is noted that the features upon which appellants relies (i.e., the agent generating a second input interface) are not recited in the rejected claim(s). Although the claims are interpreted in light of the specification, limitations from the specification are not read into the claims. See *In re Van Geuns*, 988 F.2d 1181, 26 USPQ2d 1057 (Fed. Cir. 1993).

See Examiner's Answer, pages 59-60. The Appellants emphasize that claim 15 recites "**the agent generates a first input interface** to allow for registering the entry representative of the data object, **and generates a second input interface** to allow for registering the entry representative of the application" (emphasis added). Thus, the limitation of the agent generating a second input interface is recited in the claim. As stated in the Appeal Brief, <u>Brodsky</u> discloses a number of different views to allow the user to construct an object hierarchy or its component parts, which may comprise one or more observer objects or a component part of a single observer object. <u>See</u> <u>Brodsky</u>, column 3 line 64-column 4 line 10. However, <u>Brodsky</u> does not teach generating a view for registering an observed object and generating a different view for registering an observer object.

Therefore, <u>Brodsky</u> fails to teach the above limitation of claim 15. The Examiner does not indicate and the Appellants' cannot discern any part of <u>Chow</u> that cures the aforementioned deficiencies of <u>Brodsky</u>. Thus, the Examiner has not established that <u>Brodsky</u> and <u>Chow</u> teach each element of claim 15 as required to establish a *prima facie* case of obviousness. Accordingly, the Appellants respectfully request that the rejection of claim 15 be reversed.

D.   Rejection of Claims 6, 8, 13, 20, 22, and 27 Under 35 U.S.C. §103(a) based on Brodsky, Chow, and Attwood

Claims 6, 8, 13, 20, 22, and 27 remain rejected under 35 U.S.C. § 103(a) as allegedly being unpatentable over <u>Brodsky</u> in view of <u>Chow</u> and in further view of Attwood et al. (U.S. Publication No. 2005/0015441) ("<u>Attwood</u>"). Claims 6, 8, 13, 20, 22, and 27 depend from one of independent claims 1 and 14 and thus incorporate the limitations thereof. The Examiner does not indicate and the Appellants do not discern any part of <u>Attwood</u> that cures the aforementioned deficiencies of <u>Brodsky</u> and <u>Chow</u> set forth above. For at least the aforementioned reasons regarding independent claims 1 and 14, <u>Brodsky</u>, <u>Chow</u>, and <u>Attwood</u> do not teach or suggest all the limitations of these dependent claims. Accordingly, the Appellants respectfully request that the rejection of claims 6, 8, 13, 20, 22, and 27 be reversed.

E.   Rejection of Claims 2, 3, 10-12, 16, 17, and 24-26 Under 35 U.S.C. §103(a) based on Brodsky, Chow, and Reed

Claims 2, 3, 10-12, 16, 17, and 24-26 remain rejected under 35 U.S.C. § 103(a) as allegedly being unpatentable over <u>Brodsky</u> in view of <u>Chow</u>, as applied to claims 1 and 14, and further in view of Reed et al. (U.S. Patent No. 6,044,205) ("<u>Reed</u>"). Claims 2, 3, 10-12, 16, 17, and 24-26 depend from one of independent claims 1 and 14 and thus incorporate the limitations thereof. The Examiner does not indicate and the Appellants do not discern any part of <u>Reed</u> that cures the aforementioned deficiencies of <u>Brodsky</u> and <u>Chow</u>. For at least the above reasons regarding independent claims 1 and 14, <u>Brodsky</u>, <u>Chow</u>, and <u>Reed</u> do not teach or suggest all the limitations of these dependent claims. Accordingly, the Appellants respectfully request that the rejection of claims 2, 3, 10-12, 16, 17, and 24-26 be reversed.

CONCLUSION

In view of the foregoing, the Appellants respectfully request reversal of all the above rejections in connection with claims 1-28.

Respectfully submitted,

BLAKELY SOKOLOFF TAYLOR & ZAFMAN LLP
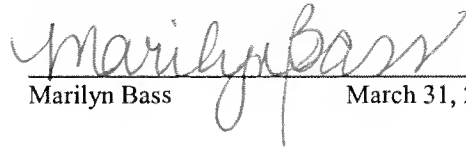
Dated: __3/28_____, 2011

/Thomas M. Coester/
Thomas M. Coester, Reg. No. 39,637

1279 Oakmead Parkway
Sunnyvale, California 94085-4040
Telephone (310) 207-3800
Facsimile (310) 820-5270

CERTIFICATE OF TRANSMISSION

I hereby certify that this correspondence is being submitted to the United States Patent and Trademark Office electronically via EFS Web on the date shown below.

Marilyn Bass   March 31, 2011